

### Abstract

*Motion, Energy, and Impact are important topics in High-school Physics. Explaining those topics to students are always challenging for teachers, due to the limitation of traditional teaching methods using printed books. Teachers must be able to explain the meaning of the formulas, and also the implementation of those formulas in everyday lives. Students are having their own problems in understanding those formulas and when to use those formulas in solving problems. In order to eliminate those barriers, an interactive physics application software is developed. The software is aimed to help teachers teach and students learn about motion, energy, and impact. Moreover, users may use the simulation features based on user input. The software content is designed based on the newest curriculum with user friendly interface that enables teachers and students use the software without any difficulties.*

**Keywords/Kata kunci:** Pembelajaran interaktif, Fisika, Gerak, Energi, Tumbukan